DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021623 Address: 333 Burma Road **Date Inspected:** 25-Feb-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

This QA Inspector randomly observed the following work in progress.

OBG 14EAST

This Quality Assurance (QA) Inspector observed ZPMC personnel performing heat straightening, member identified as floor beam (FB3265). Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Zhong Guo Hui was present to monitor the heat straightening process. The heat straightening appeared to comply with heat straightening Report HSR1 (B)-10104.

This QA Inspector observed installation/ erection of edge plate (EP3027E) was in progress in OBG segment 14east.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068097 performing the Shielded Metal Arc Welding process on weld 006 located at PCMK SEG3019Z. ZPMC QC Mr. Zhong Guo Hui was monitoring

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this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u5b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066326 performing the Shielded Metal Arc Welding process on weld 004 located at PCMK SEG3019X. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u5b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067571 performing the Shielded Metal Arc Welding process on weld 006 located at PCMK SEG3019X. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u5b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067665 performing the Shielded Metal Arc Welding process on weld 142 located at PCMK FB3260-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2111- B-u2-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 068917 performing the Shielded Metal Arc Welding process on weld 017 located at PCMK FB3271-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2111- B-u2-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066236 performing the Flux Cored Arc Welding process on weld 002 located at PCMK SEG3019U. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-ESAB-Repair. Weld repair report identified as B-WR20270.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 209 located at PCMK SEG3019M. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2133-ESAB.

This Quality Assurance (QA) Inspector observed ABF personnel performing magnetic particle testing back gouged area of the weld between AP3007 and longitudinal diaphragm. Weld number identified as SEG3019Z-008.

OBG 13AE

This QA Inspector observed installation/ erection of grillage (SA7038) was in progress in OBG segment 13AE See attached photo.

OBG 13CE

This Quality Assurance (QA) Inspector observed ABF personnel performing Ultrasonic testing on the repair areas of deck panel splice weld between DP3104 and DP3105. Weld number identified as SEG3011-007. This QA Inspector observed during the ultrasonic testing ABF QA discovered four rejectable longitudinal linear indications.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.







Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar, Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer